

OPERATING INSTRUCTION



OL35E-NA

Code	PM.7.002374.EN
Version	D
Date	20.03.2018



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OVERSPEED GOVERNOR



Product manufacturer reference can be found on the product type label. For any support or further questions please contact your trading office.





Overspeed Governor

OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.001
Datum/date 08.04.2011
Stand/version D-20.03.2018
Geprüft/approved WAT/MZE

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1 General information prior to installation

1.1 Description and functions

The overspeed governor is a safety device that comes into operation when the lift car exceeds its permitted speed.

If the lift car exceeds its rated speed upon descent, the overspeed governor release when its tripping speed is reached and triggers the safety gear on the lift car via the governor rope. The lift car is brought to a standstill and clamps onto the guide rails.

The basic functions of the governor are to detect overspeed mechanical and electrically:

- to activate the safety gear mechanical
- to stop the elevator drive electrically

A tension weight is needed to tighten the rope of the overspeed governor.

Nominal speed max. 600ft/min (3,05m/s)

Travel height max. 500ft (152,4m)

Rope diameter $d = 6 / 6,5\text{mm}$

		Setting 1	Setting 2
Brake force of the governor	min.	500N	800N
	max.	1000N	1300N
Tension weight	min.	250N	600N
	max.	800N	800N

Travel downwards:

Because of the centrifugal force, two rotating spring loaded flyweights (1) are forced outwards. Thereby, the two eccentric wheels (3) connected with the flyweights move towards the trip wheel (6) in the centre.

If the nominal elevator speed is exceeded, the flyweight (1) will hit the contact plate (7), activating the overspeed contact (5) to switch off the safety circuit.

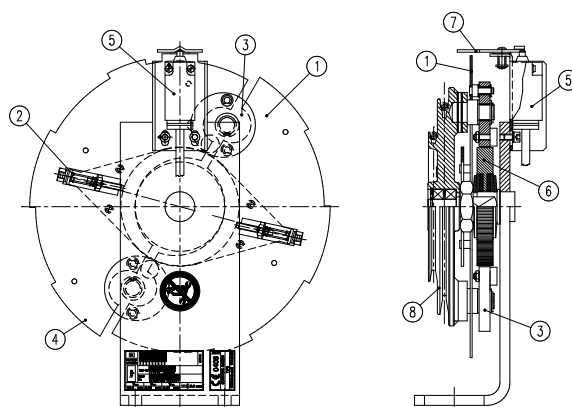
If the speed still increases, the eccentric wheels will grip into the non-rotating trip wheel (6), which will block the governor wheel and activate the safety gear.

The trip wheel has a friction coupler, which limit the force in the rope to max. 1000 / 1300N. If the force in the rope exceeds the brake force, the trip wheel starts to rotate together with the governor wheel. This to protect rope and the safety gear system from damage.

Travel upwards:

In upwards direction the safety circuit is switched off in the same way as for downwards direction.

The safety gear will not be activated in upward direction!



- | | |
|--------------------|----------------------|
| 1. Flyweight | 5. Overspeed contact |
| 2. Spring | 6. Trip wheel |
| 3. Eccentric wheel | 7. Contact plate |
| | 8. Governor wheel |

Overspeed Governor

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1.2 Liability and guarantee

This instruction handbook is written for people who are familiar with lift servicing and installation. Sufficient knowledge of lifts is essential.

WITTUR accept no responsibility for damage caused by improper handling, or for damage caused as a result of actions other than those stated in these operating instructions.

The WITTUR guarantee may be voided if parts other than those described in these instructions are installed.

Unless stated otherwise, the following are not permissible due to technical safety reasons:

- The use of components other than those installed
- Carrying out modifications, of any kind on the overspeed governor
- The installation of overspeed governors other than those described or the installation of unsuitable overspeed governors.
- Destruction of the lead seal
- Carrying out faulty or improper maintenance or inspection checks
- using unsuitable accessories, spare parts or operating material which has neither been released by the WITTUR Company nor consists of original WITTUR spare parts

1.3 Safety precautions

WITTUR machine installation or repair engineers are chiefly responsible for the safe operation of machinery.

It is essential to comply with and keep abreast of all safety rules and legal obligations in order to avoid personal / product damage during installation, maintenance and repair work.

Important safety advice and danger warnings are emphasized with the following symbols:



General danger warning



High danger risk warning (i.e. crushing edge, cutting edge etc.).



Risk of damage to machinery parts (i.e. due to incorrect installation, or such like).



Important information sign

These operating instructions belong with the whole installation and must be kept in a safe place at all times (i.e. machine room).

The proper assembly and installation of WITTUR swingarm tensions weights requires correspondingly well trained fitting engineers. The responsibility of training lies with the company appointed to carry out the work.

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Before starting installation work:



Only properly trained personnel may carry out work, or be allowed access to the installation site.

- Attach safety devices to guard against falling (platform or harnesses)
- Cover any floor openings
- Secure installation tools or objects against accidental falling
- Lift shaft openings should be cordoned off and suitable warning signs should be erected when working in shaft openings
- Work involving electrical equipment should only be carried out by an electrical engineer or qualified personnel.

1.4 Preparation

Before beginning installation work it is in your own interest to ascertain the constructional and spatial conditions. Where (workshop or on site) and when which installation operations can or must be carried out. It is recommended therefore, taking into account all the given circumstances, to plan the various operational sequences in advance, rather than carrying them out prematurely and in an unconsidered manner.

On receipt of the delivery, the goods or components should be checked for correctness and completeness with the order sheet.

The following should be checked also:

- that the factory and order number correspond
- that the details on the name plate correspond to those on the order
- the elevator speed
- the elevator travel height
- the rope wheel diameter suites to the overspeed governor rope

1.5 Advice for when working on safety components

Overspeed governors are classified as safety components. It is most important that the standards and guidelines described in this section be complied with as well as those given in the rest of this operating manual.



These instructions, and especially the section on safety precautions, should be read and fully understood before work begins.

Safety devices require special attention. It is compulsory that they function perfectly to ensure danger free installation operation.

Safety devices that can only be adjusted after installation should be done so immediately after installation.

Operation of safety devices installed ex-works must be tested immediately.

If it is necessary to disassemble a safety device during servicing or repair, they should be reassembled and comply with the required tests, as soon as the work has been carried out.

Overspeed Governor OL35E-NA

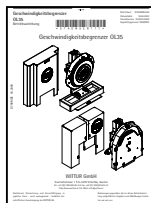
Operating instructions

Blatt/sheet PM.7.002374.005
Datum/date 08.04.2011
Stand/version 22.03.2013
Geprüft/approved WAT/MZE

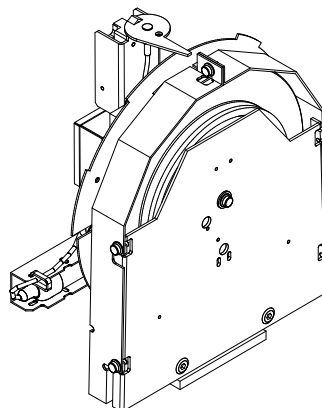
1.6 Content of supply

After delivery, check the overspeed governor for damage and for full delivery of parts. The content of supply covers:

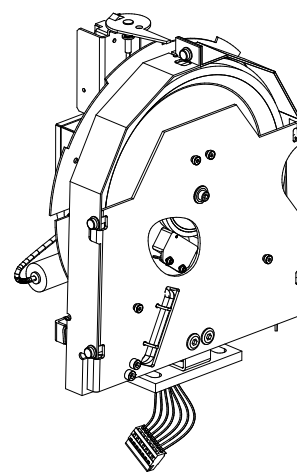
- Operating instructions manual
- Overspeed governor OL35E-NA (pre-adjusted and calibrated at the factory) including over-speed contact



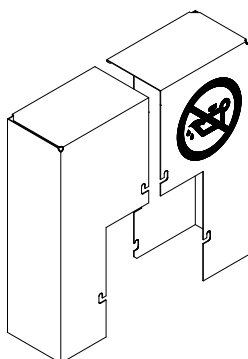
- Magnet Encoder (pre-assembled; optional)



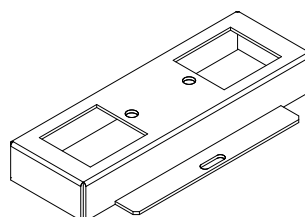
- Remote control (pre-assembled; optional)



- Safety cover



- Different types of bases (optional) including screw package



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Blatt/sheet PM.7.002374.006
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2 Name plate, designation, identification

The overspeed governor OL35E-NA identification indicators are located on the governor safety cover.

These consist of a metal name plate and a identification sticker which gives following data (meeting ASME A17.1):



The overspeed governor is pre-adjusted and calibrated at the factory. No re-adjustment is allowed.

- Mechanical tripping speed
- Size, material and construction of the governor rope
- Governor pull through tension force
- Type term of overspeed governor
- Nominal speed
- Safety circuit switch off speed
- Serial number
- Elevator number

⊕ MANUF.: WITTUR GMBH 604223H02	
MODEL	#####
TRIP.SPD.	## M/S ## FT/M
CABLE DIAMETER	# mm
TYPE	#### "CLASS" T.S. ROPE
PULL THRU	MIN #### N #### LBF
	MAX #### N #### LBF
DO NOT LUBRICATE GOV. ROPE ⊕	

Labels pointing to the form:

- Type term
- Tripping speed TS
- Data of governor rope
- Pull through tension force

Date of manufacture		Prod. Date: YYYY-MM-DD		#####		QR Code	
Type term		WITTUR		Serial - No.: #####		QR Code	
Serial number		F BRAKE MIN		Elevator-No.: #####		80479 H01	
min. brake force (N)		#### N		V _{NS} ↓↑ V _{CS} ↓ V _{TS}		#.# mm	
Order number - Elevator number (refer to delivery or order sheet)		### m/s		### m/s		### m/s	
Nominal speed NS = (m/s)		Safety circuit switch off speed (m/s)		Tripping speed TS = (m/s)		Rope diameter	


Overspeed Governor OL35E-NA

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3 Installation

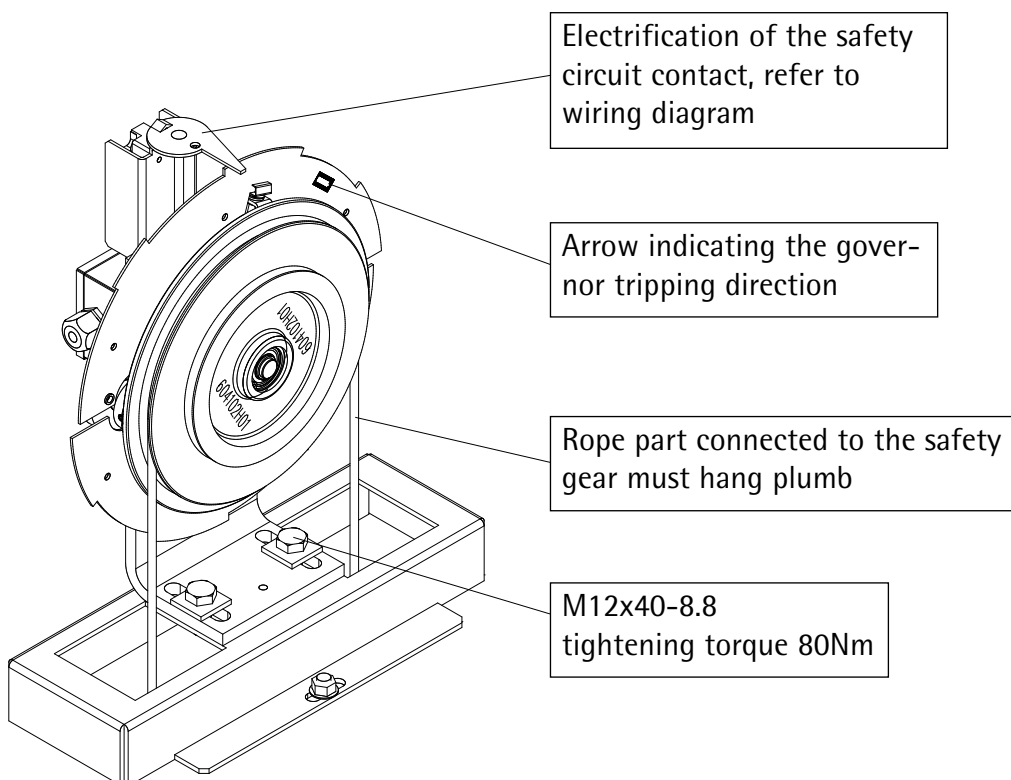
3.1 General

 **Check the direction of rotation:** When the car / counterweight travels downwards the governor has to rotate in the arrow direction.

3.1.1 Handling of the OL35E-NA

 Don't take / carry the governor by the fly-weight or overspeed contact!

 Don't use oil or grease as lubrication! This might reduce the governor breaking force!




Overspeed Governor

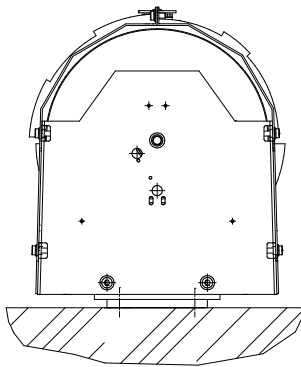
OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.008
 Datum/date 08.04.2011
 Stand/version 20.06.2013
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3.1.2 OL35E-NA Fixing possibilities

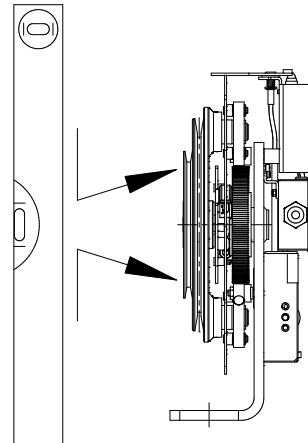
 OL35E-NA can be mounted standing only



3.1.3 Installation tolerances

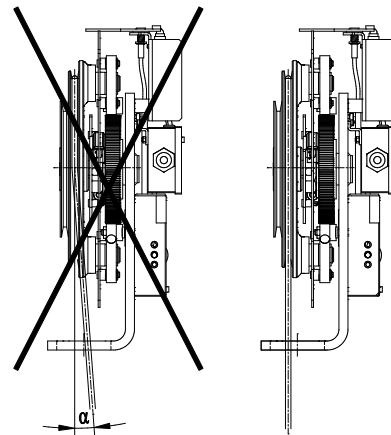


The overspeed governor must be installed vertically.



The overspeed governor must be installed in a way, that the governor rope runs parallel into the wheel groove!

The max. allowed tolerances are: max. $\pm 2^\circ$




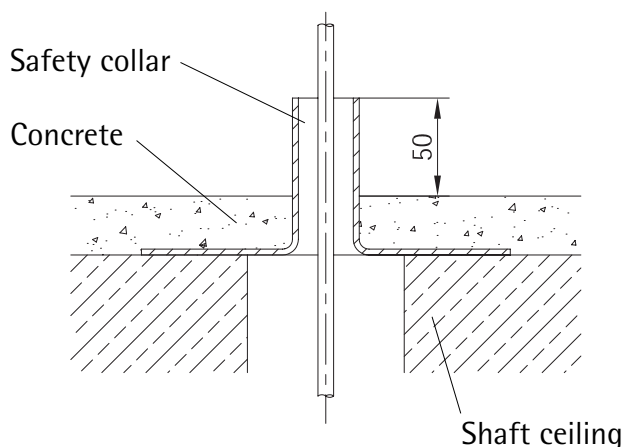
Overspeed Governor OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.009
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3.2 Installing the overspeed governor in the machine room


 Always pay attention to the overspeed governor rotational direction during each stage of installation.




Preparation

The overspeed governor can either be installed directly on the machine room floor or on a support structure.


 Lifts complying with EN-81 require the rope aperture to be kept as small as possible and to be fitted with a 50 mm high collar. A corresponding safety collar must be fastened to the floor before installation takes place.

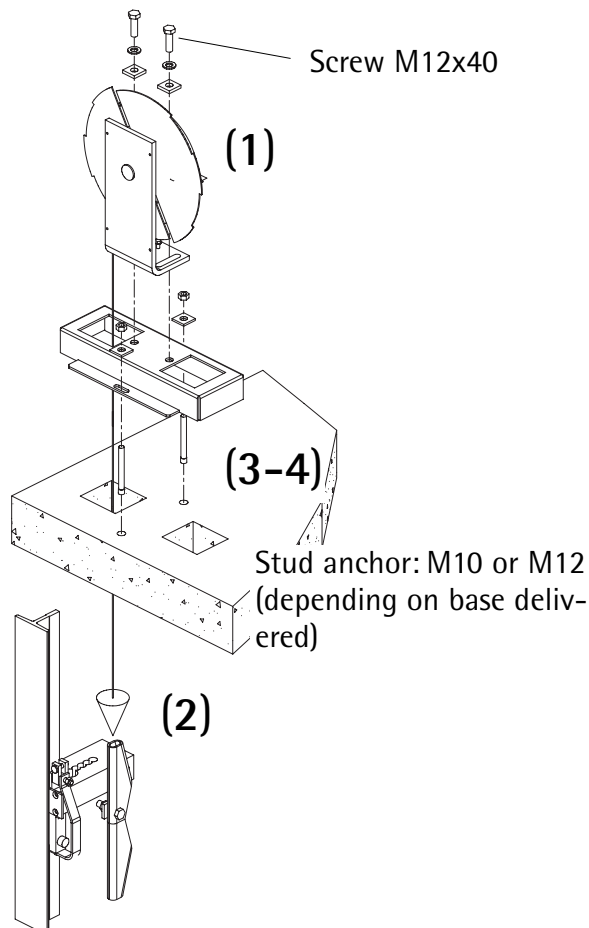
 If a cement floor is to be poured over the concrete after installation, bear this in mind when fitting the collar.

Installation procedure

 Always pay attention to the overspeed governor rotational direction during each stage of installation.

- (1) If a supporting base is being used, it must be screwed to the overspeed governor.
- (2) Position the overspeed governor (with or without base) and align the plumb line over the centre of the safety gear
- (3) Mark the drill holes and put the stud anchor in place (stud anchors are delivered with supporting base)
- (4) Fasten down the overspeed governor (with or without supporting base)

 Take care of tightening torque
Screw M10: 46Nm
Screw M12: 80Nm



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Blatt/sheet PM.7.002374.010
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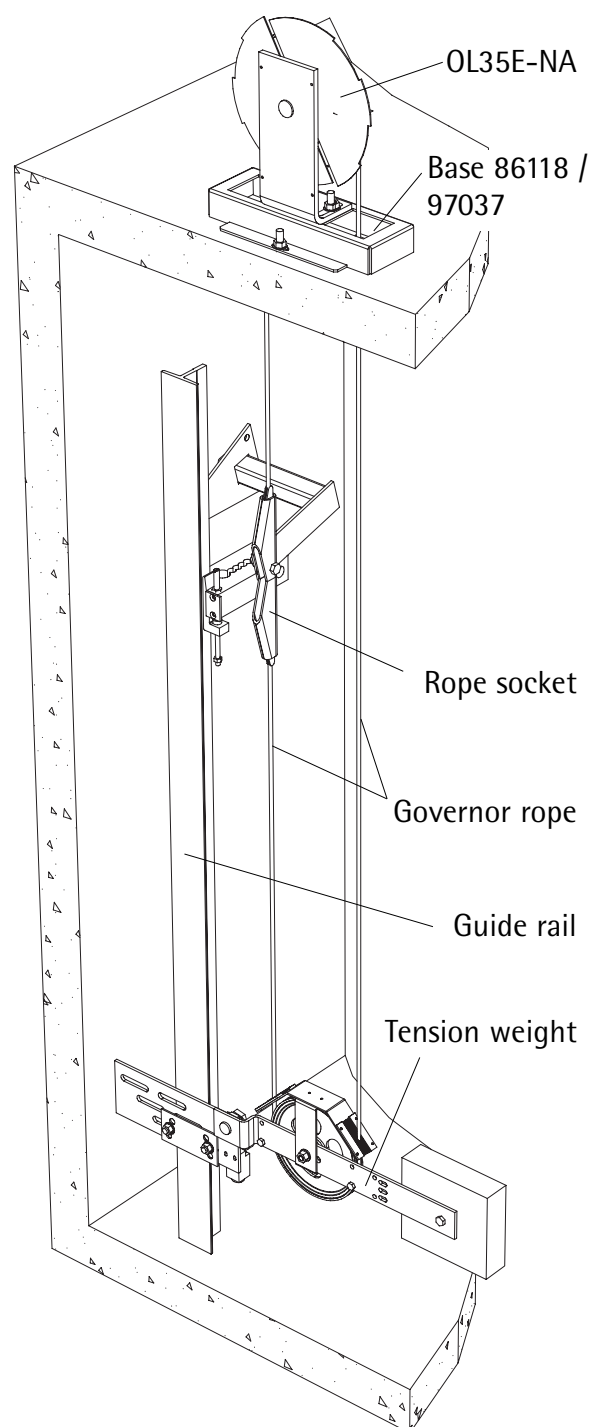
3.3 Roping of the overspeed governor

The overspeed governor can only operate perfectly if the governor rope and the tension weight are installed correctly.

- (1) Leave enough extra length on the governor rope and lay it over the overspeed governor wheel
- (2) Connect the first rope end to the rope socket and attach it to the safety gear
- (3) Install the tension weight (refer to operating instructions of tension weight)
- (4) Connect the second rope end to the rope socket of the safety gear linkage

3.3.1 Variations of OL35-NA overspeed governor arrangements

OL35E-NA placed in shaft top



Overspeed Governor

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3.4 Overspeed contact



Work involving electrical equipment should only be carried out by an electrical fitter or qualified personnel.



Before carrying out work, switch off all voltage to installation equipment.



Take note of the following when laying the connection cable:

- that the single polarity cables have double insulation
- the use and laying of cables is governed by the EMC



The overspeed contact opens the lift installation's remotely controlled safety circuit.

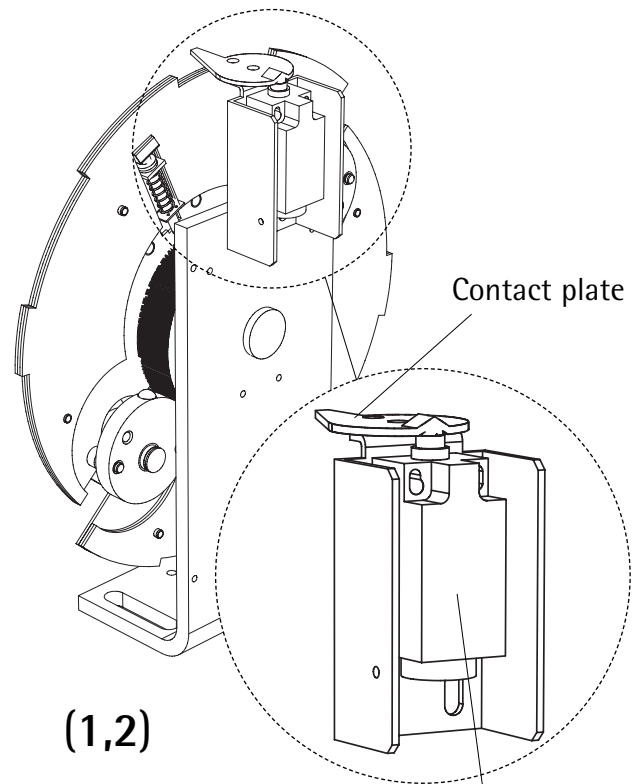


The contact is adjusted and sealed in the factory. It is not allowed to be adjusted on site.

- (1) Connect the contact
- (2) Test the contact function



The contact plate and the detent pin must be put back to the initial position after being manually tested.

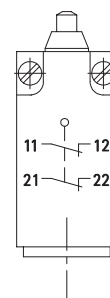


(1,2)

Overspeed contact

Overspeed contact

- use category: AC 15, B300, U_e/I_e 240V (1,5A)
- thermal current: $I_{the} = 5A$
- insulation voltage: $U_i = 250V$ AC
- protection type: IP 43
- approved in accordance: VDE 0660 T100
IEC/EN 60947-5-1



Overspeed Governor OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.012
Datum/date 08.04.2011
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Geprüft/approved WAT/MZE

3.5 Electrical installation of the remote control (optional)

The remote control allows to trigger the overspeed governor electrically in downward direction with rated or service speed.

Additionally the remote control can be used to reset the contact plate electrically.

3.5.1 Wiring of the remote control

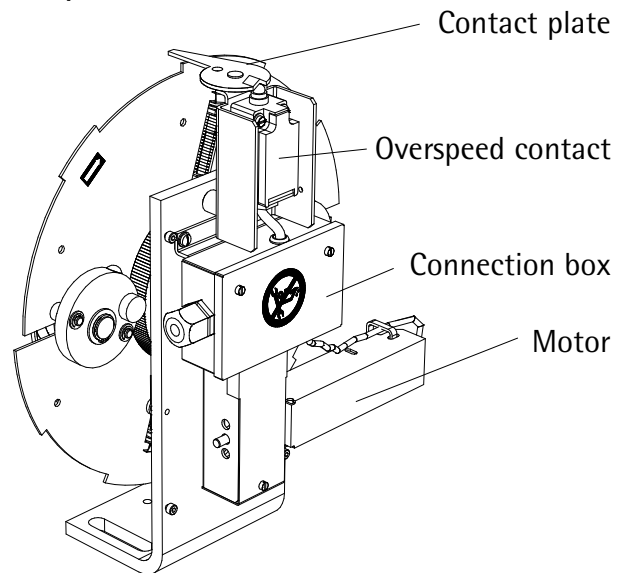


The overspeed contact and the motor are pre-wired, adjusted and sealed in the factory.

Power supply of the motor:

Voltage	24VDC +10/-15%
Current	1,6A +/-10%
switch-on time	min. 2 sec max.30 sec

Motor protection:



The motor protection (PTC) is included in the connection box of the remote control.

- response time for the motor protection: typical 5 sec. max. 30 sec.
- recovery time for the motor protection: in. 120 sec.

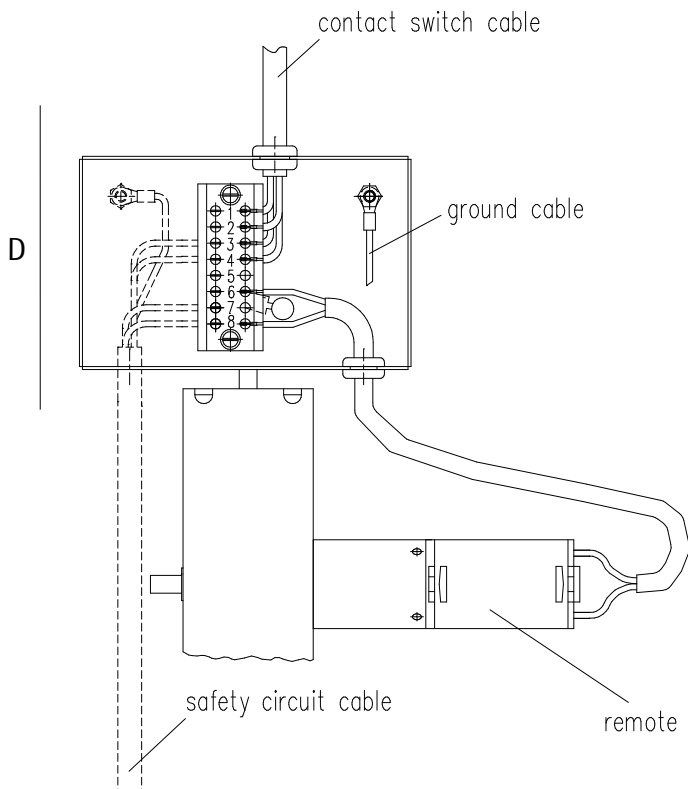
Overspeed Governor

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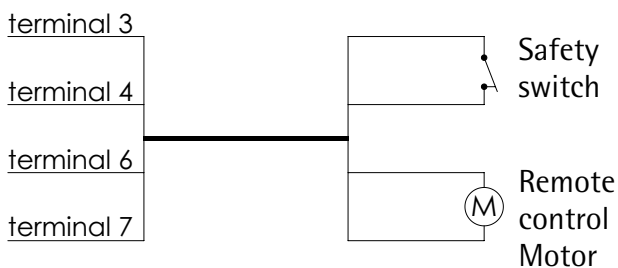
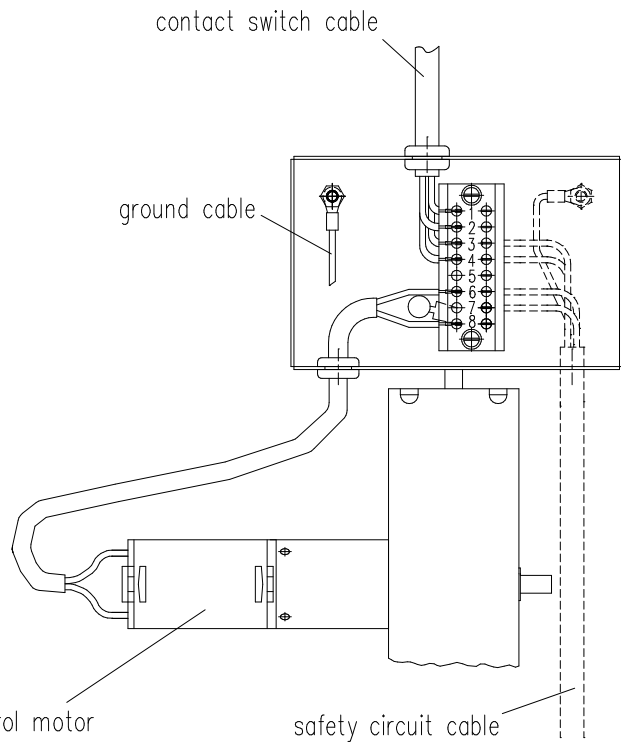
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Motor Position "B"



Motor Position "A"



Motor Position "A" - right		
pin	trip mechanical	reset switch
6	+24 VDC	GND
7	GND	+24 VDC

Motor Position "B" - left		
pin	trip mechanical	reset switch
7	+24 VDC	GND
8	GND	+24 VDC



The control panel should be able to operate the motor in both directions for the specified time.

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Blatt/sheet PM.7.002374.014
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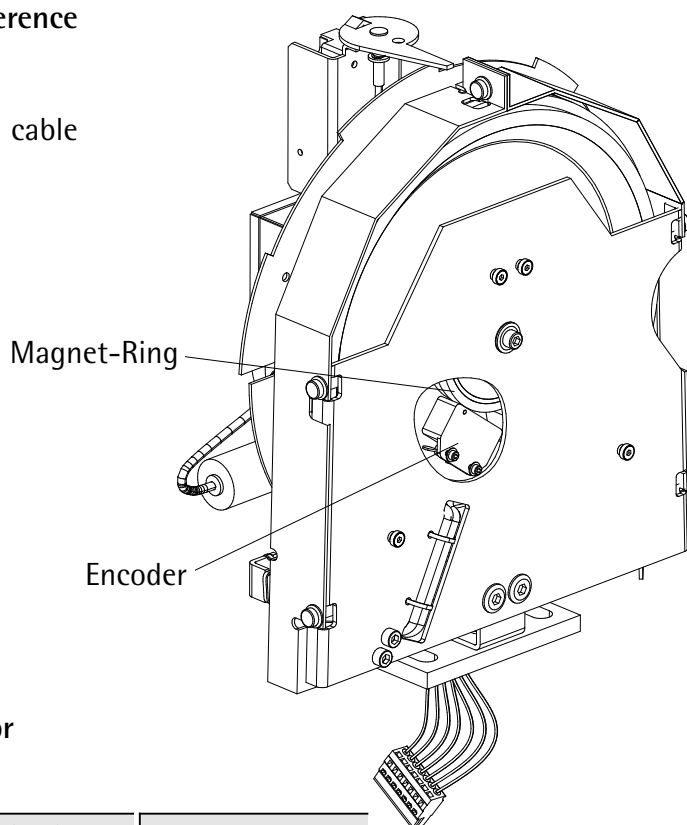
3.6 Electrical installation of the Magnet-Ring Encoder (optional)

The magnetic ring encoder is used for measuring the accurate car position.

3.6.2 Wiring assignment

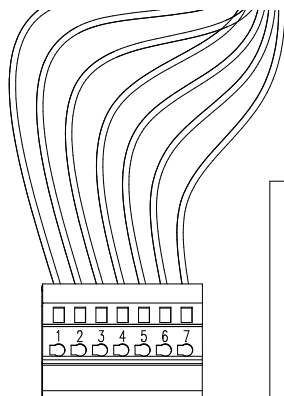
 The signal may be used **only as reference** to another available source.

 The encoder is delivered with 4 ft cable protected by a flexible conduit.



3.6.1 Specification of the magnet sensor

type	voltage supply range +Vs	output	accuracy
Phönix P9500	7,5 .. 13 VDC	20 mA / 5 V DC	800 pulses/rev.



Location	Color Code	Designation
PIN 01	RED	VCC
PIN 02	BLACK	GROUND
PIN 03	ORANGE	CHANNEL -B
PIN 04	GREEN	CHANNEL B
PIN 05	BROWN	CHANNEL -A
PIN 06	YELLOW	CHANNEL A
PIN 07	BARE	SHIELD

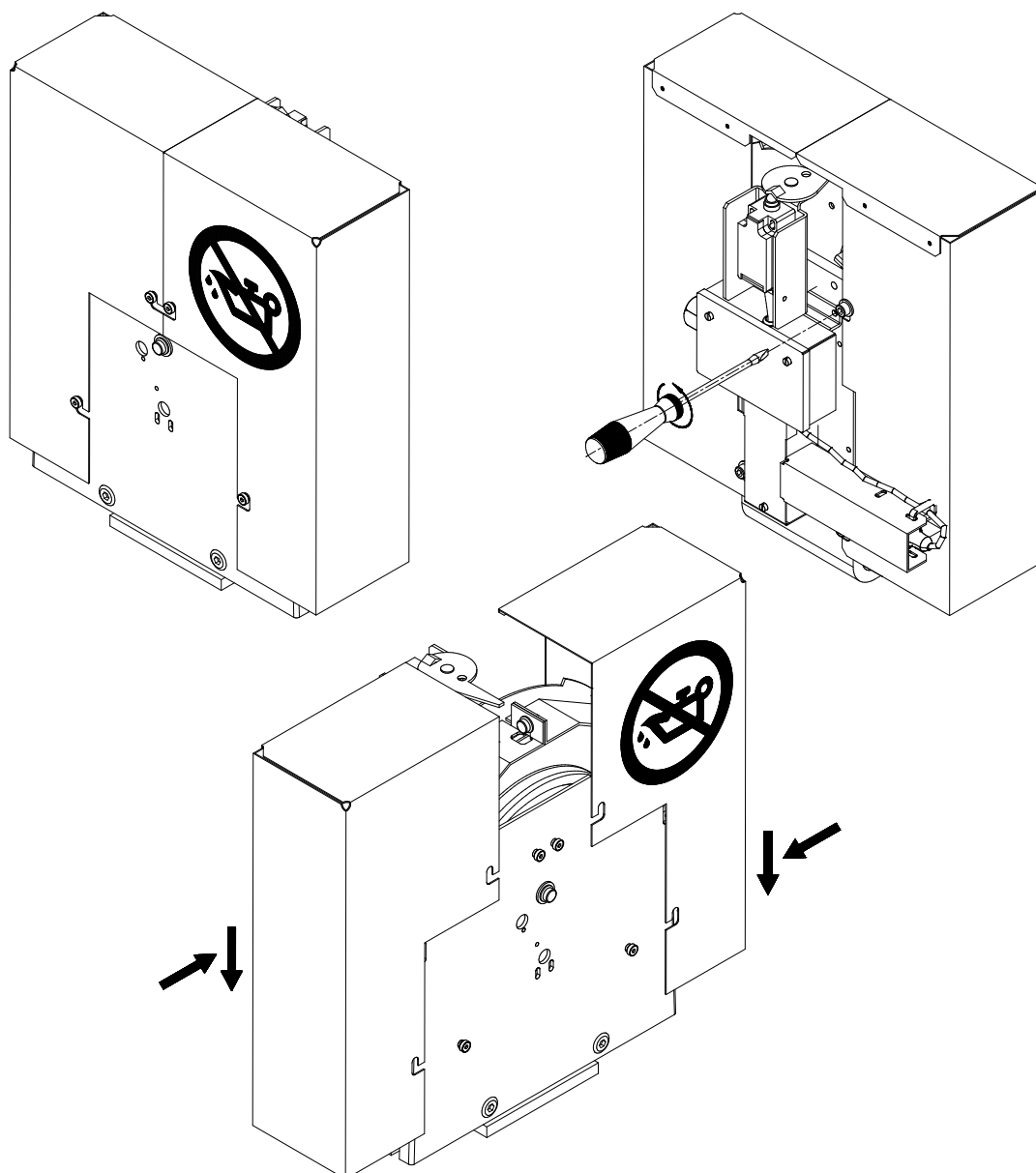
Overspeed Governor OL35E-NA

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Blatt/sheet PM.7.002374.015
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3.7 Attaching the safety cover

Move the delivered covering via the overspeed governor and attach as represented with screws



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4 Function testing

Granting that the installation will be done under strict observance of all standards the operational reliability of the system is assured. The quality and function of individual components are subject to thorough inspection and is checked before dispatch from our works.

The overspeed governor system should undergo an operational test before commissioning or before possible inspection from a technical institute.

First test run after installation



Before the first test run:
Clean the guide rails!



Clear all people and objects from the elevator shaft before commencing the test run -> Risk of crushing injuries!

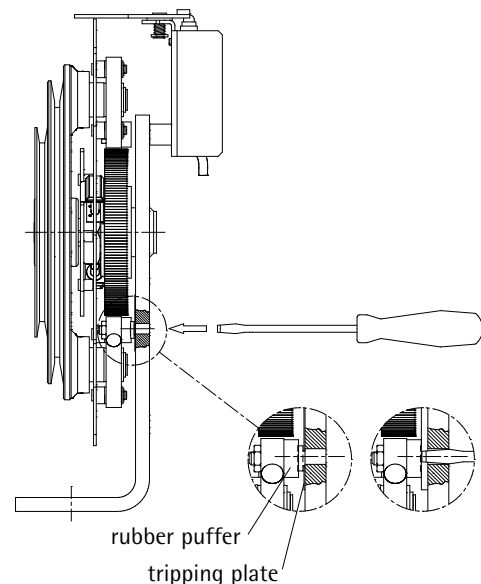
The entire elevator travel path should be slowly travelled (in inspection mode) before the functions tests. Attention should be paid to the clearance of all fastened parts, especially with regards to the guide brackets/safety gear devices. Find and remove any salient bolts or other dangerous restrictions well in advance.

A **static functions test** should be carried out afterwards.

Static functions test:

Overspeed governor with manual tripping:

- Trigger the overspeed governor manually by pushing a screwdriver through the hole on the back of the governor stand
- Let the lift car slowly descend



Overspeed governor with remote control:

- Operate the remote tripping function
- Let the lift car slowly descend

The overspeed governor must actuate the safety gear. The overspeed contact must interrupt the safety circuit by activating the overspeed contact.



Reset the overspeed governor, the safety gear and the overspeed contact!


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Testing all functions


 Refer to "Section 8.10 Acceptance inspections and tests" of the ASME A17.1.


In the following the check of electrical tripping, the release of the safety gear as well as the verification of the tripping speed is described.

 The operation of the electrical tripping (CS) must be checked in both directions of movement.

Check of tripping speed (CS / TS):


- Disconnect the rope clamp from the synchronization.
- Rotate the governor manually in tripping direction - Simultaneously measure the speed on the rope with a speedometer.
- Accelerate the rotation speed - as slow as possible - until the speed governor triggers electrical and mechanical.
- Compare the measured value with the values given in the chapter 4.1.
- Connect the rope clamp with the synchronization lever again after successful testing!

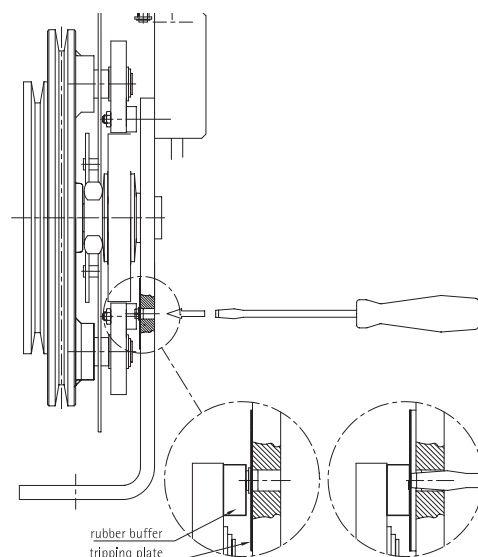
 The electrical tripping must be checked in up direction too - the governor triggers only electrically in up direction.

 The resulted figures may not be exactly (up to a few percent) the same as on the type label, although it is still correct.

Reason:

- a) Figure in label is the nominal as ordered (for tolerances see 4.1).
- b) The un-defined acceleration via hand possibly cause different measuring results. The acceleration should be as less as possible ($\sim 0.10 \text{ m/s}^2$)

 The governor must be replaced if the measured tripping speeds don't correspond roughly with the values in chapter 4.1.
Adjustments on site are not allowed!



Trigger testing is a **dynamic functions test** that can be carried out with or without the car rated load.



No one should be in the car when carrying out test runs or functions tests!



After each test, the contact plate must be reset by hand or by the use of the remote control.

Check of the electrical tripping (CS):

- Let the car ascent at rated speed
- Trigger the speed governor manually (by pushing a screwdriver trough the hole on the back of the governor stand) or by the use of the remote control

The overspeed governor must stop the elevator electrically by interrupting the safety circuit.

Check of the mechanical tripping (TS):

- Let the car descend at rated speed
- Trigger the speed governor manually (by pushing a screwdriver trough the hole on the back of the governor stand) or by the use of the remote control

The overspeed governor must stop the elevator mechanical by actuating the safety gear.

Overspeed Governor

OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.018
 Datum/date 08.04.2011
 Stand/version C-20.09.2017
 Geprüft/approved WAT/MZE

4.1 Standard speed settings



The overspeed governor of the car (C) and counterweight (CWT) are adjusted at the factory to the following tripping values (ASME A17.1).

Nominal speed NS ft/min (m/s)	Application	Contact speed CS _{down}		Contact speed CS _{up}		Tripping speed TS	
		ft/min (m/s) min.	max.	ft/min (m/s) min.	max.	ft/min (m/s) min.	max.
150 (0,76)	C	157,5 (0,80)	210,0 (1,07)	157,5 (0,80)	210,0 (1,07)	172,5, (0,88)	210,0 (1,07)
	CWT	157,5 (0,80)	231,0 (1,17)	157,5 (0,80)	231,0 (1,17)	181,6 (0,92)	231,0 (1,17)
200 (1,02)	C	210,0 (1,07)	252,0 (1,28)	210,0 (1,07)	280,0 (1,42)	230,0 (1,17)	280,0 (1,42)
	CWT	210,0 (1,07)	277,2 (1,41)	210,0 (1,07)	308,0 (1,56)	242,2 (1,23)	308,0 (1,56)
350 (1,78)	C	367,5 (1,87)	406,8 (2,07)	367,5 (1,87)	452,0 (2,30)	402,5 (2,05)	452,0 (2,30)
	CWT	367,5 (1,87)	448,2 (2,28)	367,5 (1,87)	497,2 (2,53)	423,7 (2,15)	497,2 (2,53)
500 (2,54)	C	525,0 (2,67)	562,5 (2,86)	525,0 (2,67)	625,0 (3,18)	575,0 (2,92)	625,0 (3,18)
	CWT	525,0 (2,67)	618,8 (3,14)	525,0 (2,67)	687,5 (3,49)	592,8 (3,01)	687,5 (3,49)
600 (3,05)	C	630,0 (3,20)	703,0 (3,57)	630,0 (3,20)	740,0 (3,76)	690,0 (3,51)	740,0 (3,76)
	CWT	630,0 (3,20)	773,3 (3,93)	630,0 (3,20)	814,0 (4,14)	711,4 (3,61)	814,0 (4,14)

Contact speed CS_{down}:

(for car side valid only)

CS ≤ 1,0 x TS for NS ≤ 150 ft/min (0,762 m/s)

CS ≤ 0,9 x TS for NS ≤ 500 ft/min (2,54 m/s)

CS ≤ 0,95 x TS for NS ≥ 500 ft/min (2,54 m/s)

Adjustment tolerances:

CS down -4%/+0%

TS -4%/+0%

Overspeed Governor OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.019
Datum/date 08.04.2011
Stand/version D-20.08.2018
Geprüft/approved WAT/MZE

5 Maintenance, inspection and repair

5.1 Maintenance and inspection

The overspeed governor OL35E-NA is maintenance-free, subject to elevator-specifically normal operation within its wear limits. Inspection checks must be carried out at regular intervals to guarantee safe operation.

Alterations, damage or other irregularities should be reported, and repaired if possible. Frequent servicing and control checks not only make operation of the installation safer, but also ensure long and reliable service life. It is recommended that control checks and servicing be carried out before legally prescribed functional tests (e.g. before TÜV tests).



The lift must be out of service before you can start with maintenance checks where the safety cover must be removed.

The table below shows the standard mandatory tests and intervals.



The lift installation must be immediately taken out of use should any damage or irregularities arise which could possibly impair operational safety.



The checks and tests mentioned below are the minimum required checks to ensure product safety. The required checks to adhere national laws or regulation can differ from the shown table and have to be fulfilled.



Maintenance work should be expertly carried out with utmost care in order to guarantee safe installation operation.



Please contact us at WITTUR if you have any problems or queries.



With the consent of Wittur, the test procedure and intervals can be changed.

D

5.2 Recommended checking periods

	Chapter	Acceptance test	Mandatory periodical tests OL35E-NA
Check of the mechanical tripping (TS)	4	x	
Check of the electrical tripping (CS)	4	x	
Check of the tripping speed (CS/TS)	4	x	
Cleaning	5.3		once a year
Condition of the flyweights and springs	5.3		once a year
Operation of the overspeed contact	5.3		once a year
Condition of the pulley (main) bearings	5.3		once a year
Mechanical tripping test	4		every second year
Tripping speed test	5.4		every second year
Brake force (pull through force)	5.4		every second year
Wear of the rope groove	5.3		every second year

After every operation (tripping) a visual check of the governor, the rope and the connection to the safety gear synchronisation as well as a check of the flyweights (see 5.3.2/5.3.3) has to be performed.



If any damage is recognized the product has to be changed.

Overspeed Governor OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.020
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5.3 Inspection checks

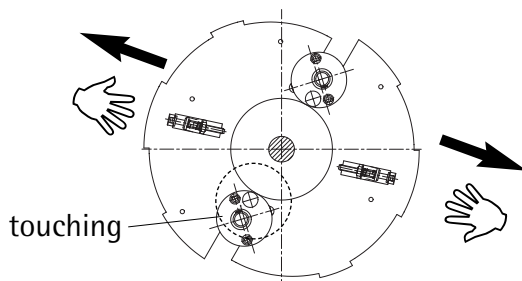


Lubrication will reduce the braking force of the overspeed governor and therefore it is strictly prohibited to lubricate any part of the governor or the governor rope!

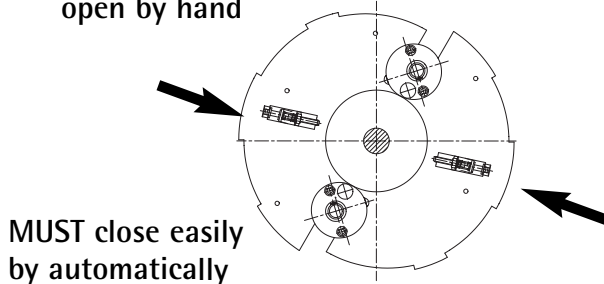
5.3.1 General checkings

- Check the overspeed governor and belonging components for damages and deformation
- Check the fixing of the overspeed governor

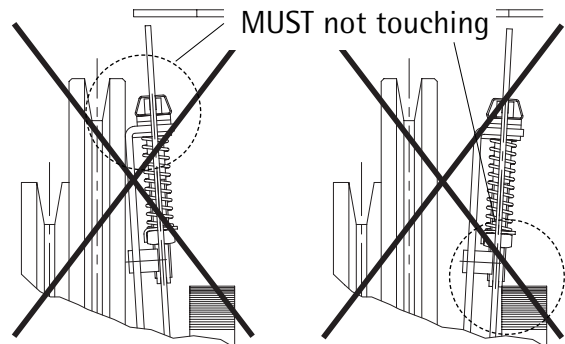
5.3.2 Check the flyweights (performance of the springs, proper operation/movement)



open by hand



5.3.3 Check the axial movement of the flyweights



Do not adjust the flyweight-springs or do any other settings! If the adjustment of the overspeed governor is faulty, please contact us at WITTUR.

Overspeed Governor

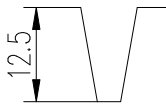
OL35E-NA

Operating instructions

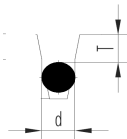
Blatt/sheet PM.7.002374.021
 Datum/date 08.04.2011
 Stand/version C-20.09.2017
 Geprüft/approved WAT/MZE

5.3.4 Check the condition (wearing) of the wheel rope groove

1. Check the groove type
2. Measure the groove wear (T) in the center of the rope on the top of a strand



3. Check the wearing out
 T_{\max} for $d=6\text{mm}$... 4,5mm
 $d=6,5\text{mm}$... 2,5mm



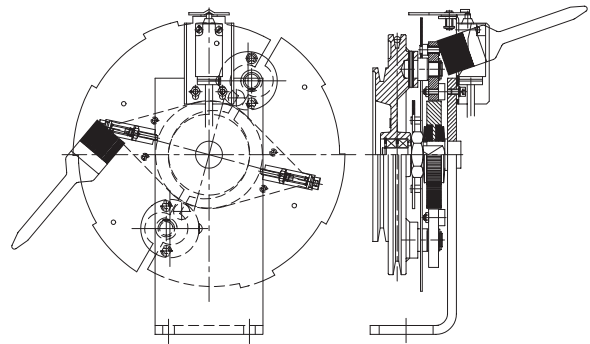
After getting the maximum allowed wearing out (=Tmax), the governor must be replaced!

Keep the governor clean, especially the flyweight springs, because they are mainly responsible for proper operation and correct tripping

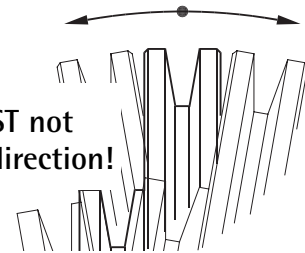
5.3.5 Check the condition of the wheel bearing



Check it by listening to the running noise.



the pulley **MUST** not move in axial direction!



Overspeed Governor

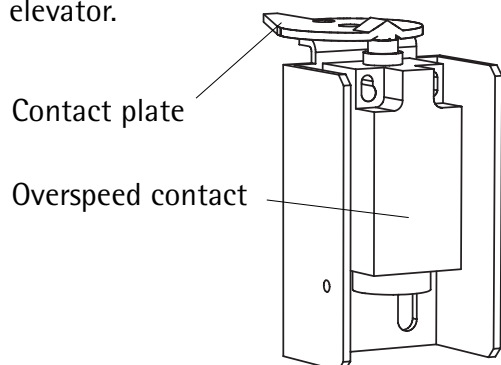
OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.022
Datum/date 08.04.2011
Stand/version D-20.03.2018
Geprüft/approved WAT/MZE

5.3.6 Check the function of the overspeed contact

Turn contact plate by hand so that contact cam on Overspeed contact is pushed. If controller is in normal mode you should not be able to drive the elevator.



The resulted figures may not be exactly (up to a few percent) the same as written on the type label, although it is still correct.

Reason:

- Figure in label is the nominal as ordered (for tolerances see 4.1).
- The un-defined acceleration via hand possibly cause different measuring results.
(The acceleration should be as less as possible, $\sim 0.10 \text{ m/s}^2$)

5.4.2 Brake force (lifting force) of the OL35E-NA governor

OL35E-NA		
Allowed brake force	500N - 1000N	800N- 1300N
Max lifting force*	300N	480N

*governor force must be 67% greater than safety gear activation force, according ASME A17.1

5.4 Functional check

5.4.1 Tripping speed (CS / TS):

The tripping speed must be checked by an authorized person.

- Disconnect the rope clamp from the synchronization.
- Rotate the governor manually in tripping direction - Simultaneously measure the speed on the rope with a speedometer.
- Accelerate the rotation speed - as slow as possible - until the speed governor triggers mechanical.
- Compare the measured value with the values given in the chapter 4.1.
- Connect the rope clamp with the synchronization lever again after successful testing!



The test must be repeated if the mechanical tripping speed don't correspond with the values in chapter 4.1.

Influences what will reduce the brake force:

- Lubrication inside the brake
- Worn out of the breaklining (see lifetime of the brake)
- Damaged or broken plate spring

Lifetime of the brake:

- Maximum 250 turns with maximum 15 turns per test
- If more than 10 turns per test, the brake of the governor must cool off for 30 minutes minimum.

Overspeed Governor OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.023
Datum/date 08.04.2011
Stand/version 08.04.2011
Geprüft/approved WAT/MZE

5.4.2.1 Measuring of the brake (lifting) force with force gauge

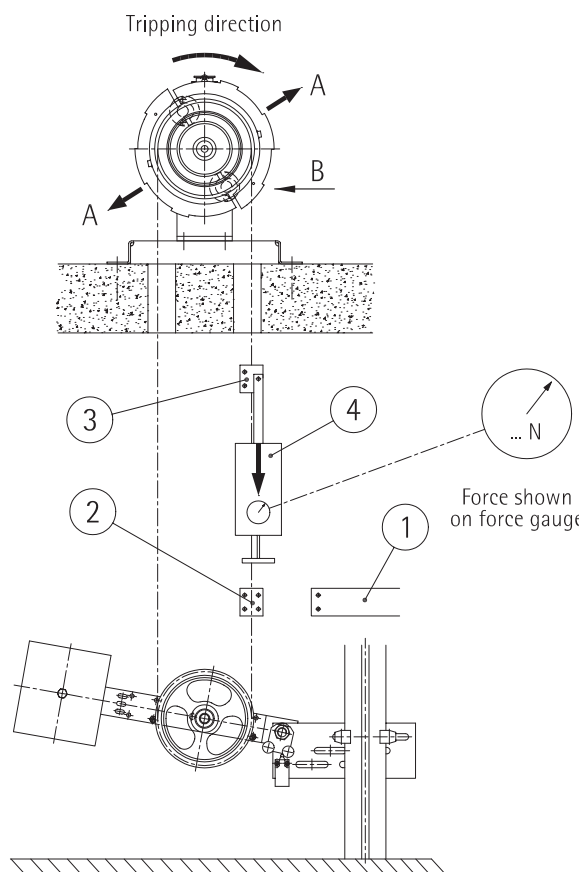



Each test has to be documented

- Detach the safety gear lever (1) from the rope anchorage (2).
- Fasten a clamp (3) with a force gauge (4) to the governor rope.
- Open the flyweight by hand (see mark A) or via tripping device as long as they are going in contact with the trip wheel shown at mark B.
- Pull down the force gauge in the tripping direction as long as the governor pulley or/and the governor rope starts to move.
- The shown value must be higher than the min. brake force (ref. chapter 5.4.2)
- Reset all to initial situation.



If the brake force is smaller the overspeed governor must be replaced!



 If, during this test, the governor rope moves while the governor pulley stand still, the sliding force of the rope inside the V-groove is already smaller than the adjusted brake force. This can be accepted when the force is higher than the min. brake force expected. Normally, with unworn V-groove, the sliding force of the rope is higher than 1300N.

Overspeed Governor

OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.024
Datum/date 08.04.2011
Stand/version 20.06.2013
Geprüft/approved WAT/MZE

5.5 Carrying out repairs



As a rule, the overspeed governor should neither be taken apart or altered in any other way (sealants, sealing wax). This also applies to repairs. Damage or deformation of the tension weight or mounting supports (i.e. as result of bending or heating) cannot be repaired or straightened.



It is forbidden to replace faulty or worn parts yourself.

The reasons are:

- Liability and safety engineering reasons
- Only official spare parts are to be used



Lift installation operation without a overspeed governor, even for short periods of time, is forbidden.

The following repairs should be carried out on site by qualified fitters/service personnel:

- Tensioning the governor rope



Please contact WITTUR if for any reason something is unclear, or you encounter damage that cannot be repaired with the help of these instructions.

5.5.1 Tensioning the governor rope

Shortening of the governor rope may be required after the commissioning of the lift installation or after longer usage.



Pay attention to a proper operation sphere of the tension weight (sufficient movement).

- Move the tension weight on the guide rails or
- Shorten the governor rope on the rope socket

5.6 Disposal of waste

Observe the country-specific laws, directives, standards and guidelines for the disposal.

5.7 Spare Parts

There are no standard spare parts defined / available for the Overspeed Governor.



Overspeed Governor OL35E-NA

Operating instructions

Blatt/sheet PM.7.002374.025
Datum/date 08.04.2011
Stand/version D-20.03.2018
Geprüft/approved WAT/MZE

6 Revision table

Issue	Datum	Beschreibung der Änderung	CR
C	20.09.2017	some minor changes	CRW-7572
D	20.03.2018	Wiring picture changed, table added, text changed	CRW-8407



WITTUR manufacturing locations

Product manufacturer reference can be found on the product type label.

ARGENTINIA

WITTUR S.A.
Av. Belgrano 2445
Sarandi - Pcia. de Buenos Aires, Argentina

ITALY

WITTUR S.P.A.
Via Macedonio Melloni no 12
43052 Colorno, Italy

AUSTRIA

WITTUR Austria GmbH
Sowitschstrasse 1
3270 Scheibbs, Austria

INDIA

WITTUR Elevator Components India Pvt. Ltd.
Survey nos 45/1B , 3 & 4 , Pondur Village
Sriperumbudur – 602 105
Tamil Nadu, India

BRAZIL

WITTUR LTDA
Rodovia Celso garcia Cid
1406 Cambé Parana, Brazil

SLOVAKIA

WITTUR S.R.O.
Priemyselná ulica 2747/7
963 01 Krupina, Slovakia

CHINA

WITTUR Elevator Components (Suzhou) Co. Ltd.
18 Shexing Road, FOHO Economic Development Zone,
Wujiang City, Jiangsu Province,
P.R. China 215214

SPAIN

WITTUR ELEVATOR COMPONENTS S.A.U.
Polig. Ind. Malpica, Calle E - Parcela 8
50016 Zaragoza, Spain

GERMANY

WITTUR ELECTRIC DRIVES GMBH
Offenburger Str. 3
01189 Dresden, Germany

TURKEY

WITTUR Asansör San. ve Tic. A.S.
Y Dudullu Organize – Sanayi Bolgesi n° 13
34776 Istanbul, Turkey